

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

5 Patent Application

Applicant(s): Kanevsky et al
Docket No : YOR919990411US1
Serial No : 09/437,352
10 Filing Date: November 9, 1999
Group: 2132
Examiner: Kambiz Zand

Title: Methods and Apparatus for Verifying the Identity of a User Requesting
15 Access Using Location Information

20

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

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Applicants hereby appeal the non-final rejection dated January 17, 2007,
of claims 1 through 58 of the above-identified patent application

REAL PARTY IN INTEREST

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The present application is assigned to International Business Machines Corporation, as evidenced by an assignment recorded on January 24, 2000 in the United States Patent and Trademark Office at Reel 010511, Frame 0772. The assignee, International Business Machines Corporation, is the real party in interest.

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RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

Claims 1 through 58 are presently pending in the above-identified patent application. Claims 1-11, 13, 15-21, 24, 26-32, 35, 37-39, 40-47, 49, and 50-57 are rejected under 35 U.S.C. §103(a) as being unpatentable over Li et al. (United States Patent Number 6,219,793 B1), and further in view of MacDoran et al. (United States Patent Number 5,757,916), and claims 12, 14, 22, 23, 25, 33, 34, 36, 48, and 58 are rejected under 35 U.S.C. §103(a) as being unpatentable over Li et al. in view of MacDoran et al., and further in view of "Wireless Enhanced 9-1-1 Service – Making it a Reality," Bell Labs Technical Journal (Autumn 1996) by Meyer et al. (hereinafter Meyer et al.). Claims 1, 16, 27, 38, 39, 42, 45, 49, 52, and 55 are being appealed

STATUS OF AMENDMENTS

There have been no amendments filed subsequent to the non-final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1 is directed to a method for verifying the identity of a user (FIG. 1: 140), said method comprising the steps of: issuing a challenge to said user (FIG. 1: 140; page 6, line 26, to page 7, line 12); receiving a response to said challenge from said user (FIG. 1: 140; page 6, line 26, to page 7, line 12); identifying a location of an authorized person associated with said response, wherein said location is identified by utilizing a portable device (FIG. 1: 140; page 7, lines 6-12) assigned to said user (FIG. 1: 140); identifying a location where said response is received (page 7, lines 13-23); and providing access to said user (FIG. 1: 140) if said locations match (page 9, lines 18-21).

Independent claim 16 is directed to a method for verifying the identity of a user (FIG. 1: 140), said method comprising the steps of: receiving a response to a challenge from said user (FIG. 1: 140; page 6, line 26, to page 7, line 12); identifying a location of an authorized person associated with said response, wherein said location is identified by utilizing a portable device (FIG. 1: 140; page 7, lines 6-12) assigned to said authorized person; identifying a location where said response is received (page 7, lines 13-23); and

providing access to said user (FIG. 1: 140) if said locations match (page 9, lines 18-21).

Independent claim 27 is directed to a system for verifying the identity of a user (FIG. 1: 140), comprising: a memory that stores computer readable code; and a processor operatively coupled to said memory, said processor configured to: receive a response to a challenge from said user (FIG. 1: 140; page 6, line 26, to page 7, line 12); identify a location of an authorized person associated with said password, wherein said location is identified by utilizing a portable device (FIG. 1: 140; page 7, lines 6-12) assigned to said authorized person; identify a location of where said response is received (page 7, lines 13-23); and provide access to said user (FIG. 1: 140) if said locations match (page 9, lines 18-21).

Independent claim 38 is directed to an article of manufacture for verifying the identity of a user (FIG. 1: 140), comprising: a computer readable medium having computer readable code means embodied thereon, said computer readable program code means comprising: a step to receive a response to a challenge from said user (FIG. 1: 140; page 6, line 26, to page 7, line 12); a step to identify a location of an authorized person associated with said response, wherein said location is identified by utilizing a portable device (FIG. 1: 140; page 7, lines 6-12) assigned to said authorized person; a step to identify a location where said response is received (page 7, lines 13-23); and a step to provide access to said user (FIG. 1: 140) if said locations match (page 9, lines 18-21).

Independent claim 39 is directed to a method for identifying a user (FIG. 1: 140) requesting access to a device, said method comprising the steps of: receiving biometric information from said user (FIG. 1: 140; page 9, line 22, to page 10, line 6); identifying each registered person within a predefined distance of said requested device, wherein said identification is performed by utilizing a portable device (FIG. 1: 140; page 9, line 22, to page 10, line 6) assigned to each registered person; and identifying said user (FIG. 1: 140) from among said identified persons using said biometric information (page 9, line 22, to page 10, line 6).

Independent claim 42 is directed to a method for identifying a user (FIG. 1: 140) requesting access, said method comprising the steps of: receiving biometric information from said user (FIG. 1: 140; page 9, line 22, to page 10, line 6); identifying a list

of potential users (FIG. 1: 140) based on said biometric information (page 9, line 22, to page 10, line 6); and identifying said user (FIG. 1: 140) by comparing a location of each identified potential users (FIG. 1: 140; page 7, lines 6-12) with a location where said biometric information was obtained (page 7, lines 13-23), wherein said location of each
5 identified potential user (FIG. 1: 140) is obtained by utilizing a portable device (FIG. 1: 140) assigned to each identified potential user (FIG. 1: 140; page 7, lines 6-12).

Independent claim 45 is directed to a method for identifying of a user (FIG. 1: 140) requesting access to a device, said method comprising the steps of: receiving a communication from a transmitting device assigned to said user (FIG. 1: 140); identifying
10 said user (FIG. 1: 140) using a voice recognition system (page 6, lines 7-25); and confirming said user (FIG. 1: 140) requesting access to said device is physically present at the location of said requested device by determining a location of said transmitting device (page 7, lines 6-12).

Independent claim 49 is directed to a system for identifying a user (FIG. 1: 140) requesting access to a device, comprising: a memory that stores computer readable code; and a processor operatively coupled to said memory, said processor configured to:
15 receive biometric information from said user (FIG. 1: 140; page 9, line 22, to page 10, line 6); identify each registered person within a predefined distance of said requested device, wherein said identification is performed by utilizing a portable device (FIG. 1: 140; page 9, line 22, to page 10, line 6) assigned to each registered person; and identify said user (FIG. 1:
20 140) from among said identified persons using said biometric information (page 9, line 22, to page 10, line 6).

Independent claim 52 is directed to a system for identifying a user (FIG. 1: 140) requesting access, comprising: a memory that stores computer readable code; and a
25 processor operatively coupled to said memory, said processor configured to: receive biometric information from said user (FIG. 1: 140; page 9, line 22, to page 10, line 6); identify a list of potential users (FIG. 1: 140) based on said biometric information (page 9, line 22, to page 10, line 6); and identify said user (FIG. 1: 140) by comparing a location of each identified potential users (FIG. 1: 140; page 7, lines 6-12) with a location where said
30 biometric information was obtained (page 7, lines 13-23), wherein said location of each

identified potential user (FIG. 1: 140) is obtained by utilizing a portable device (FIG. 1: 140) assigned to each identified potential user (FIG. 1: 140; page 7, lines 6-12).

Independent claim 55 is directed to a system for identifying of a user (FIG. 1: 140) requesting access to a device, comprising: a memory that stores computer readable code; and a processor operatively coupled to said memory, said processor
5 configured to: receive a communication from a transmitting device assigned to said user (FIG. 1: 140); identify said user (FIG. 1: 140) using a voice recognition system (page 6, lines 7-25); and confirm said user (FIG. 1: 140) requesting access to said device is physically present at the location of said requested device by determining a location of said
10 transmitting device (page 7, lines 6-12).

STATEMENT OF GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Independent claims 1, 16, 27, 38, 39, 42, 45, 49, 52, and 55 are rejected under 35 U.S.C. §103(a) as being unpatentable over Li et al., and further in view of
15 MacDoran.

ARGUMENT

Independent Claims 1, 16, 27, 38, 39, 42, 45, 49, 52 and 55

Independent claims 1, 16, 27, 38, 39, 42, 45, 49, 52, and 55 are rejected under 35 U.S.C. §103(a) as being unpatentable over Li et al., and further in view of
20 MacDoran. In particular, the Examiner asserts that “MacDoran would require a single GPS device located at a client machine and the present invention would require, for example, a separate GPS device for each user of the client machine.” The Examiner further asserts that the invention disclosed by MacDoran “allows each user to have a
25 separate GPS device.” (Emphasis added.) The Examiner asserts that a person of ordinary skill in the art would be motivated to combine the methods disclosed by Li and MacDoran to grant “access to the user if the location is within a predetermined threshold as disclosed by MacDoran in order to make ‘spoofing’ the host device very difficult (MacDoran: column 1, lines 15-16).”

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As previously argued, Applicants note that none of the cited references disclose or suggest identifying a location of an authorized person associated with a response, wherein the location is identified by *utilizing a portable device assigned to a user*.

5 Applicants note that MacDoran is directed to a method and apparatus for authenticating the identity of a remote user *entity* where the identity of such user entity is authenticated by use of information specific to geodetic location of the user *entity* (see, Abstract). MacDoran compares the *expected location of an electronic device* with the *current location of the device* and will not allow access if the locations do not match.

10 The present invention, alternatively, is directed to authenticating a user by confirming the location of the user utilizing, for example, a GPS device carried by the user. Thus, MacDoran would require a *single GPS device located at a client machine* and the present invention would require, for example, a *separate GPS device for each user* of the client machine.

15 Applicants also note that MacDoran defines “entity” as an electronic device and specifically states that this definition “*does not extend to individual users* that operate an entity, because the invention does *not* have the ability to authenticate an individual person.” (Col. 6, lines 59-65; emphasis added) Thus, MacDoran actually *teaches away* from the present invention by teaching that the invention cannot be used to

20 authenticate an individual person. Regarding the Examiner’s assertion that the cited statement does “not mean that creating a system that can authenticate an individual user is therefore not taught by MacDoran,” Applicants maintain that the cited statement is evidence that the invention disclosed by MacDoran is *not* suitable for authenticating an individual person.

25 In any case, MacDoran et al. clearly do not disclose or suggest wherein the location is identified by utilizing a portable device *assigned to a user*. Please note that dictionary.com defines “assign” as “to transfer (property, rights, or interests) from one to another.” Thus, a person of ordinary skill in the art would recognize that the assignment of a portable device to a user infers more than a transient use of the device

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Regarding the Examiner's assertion that the invention disclosed by MacDoran "allows each user to have a separate GPS device," Applicants note that *allowing* a feature is **not** *equivalent to disclosing or suggesting a feature*

5 Regarding the Examiner's assertion that a person of ordinary skill in the art would be motivated to combine the methods disclosed by Li and MacDoran to grant "access to the user if the location is within a predetermined threshold as disclosed by MacDoran in order to make 'spoofing' the host device very difficult," Applicants note that, whether or not the suggested combination makes "'spoofing' the host device very difficult," the cited combination does *not* disclose or suggest wherein said location is
10 identified by utilizing a portable device assigned to said user.

Thus, Li et al. and MacDoran et al, alone or in combination, do not disclose or suggest wherein said location is identified by utilizing a portable device assigned to said user, as required by independent claims 1, 16, 27, 38, 39, 42, 45, 49, 52, and 55.

15 Additional Cited References

Meyer et al. was also cited by the Examiner for its disclosure of asking the cell phone user "Do you have any more details on your location?" (Meyer: page 189, right column, lines 1-2) Applicants note that Meyer is directed to enhanced 9-1-1 service for wireless networks. Meyer does *not* disclose or suggest the identification of a
20 user as described in the limitations of the independent claims. Furthermore, Meyer et al. do disclose or suggest wherein the location is identified by utilizing a portable device assigned to a user.

Thus, Li et al., MacDoran et al, and Meyer et al., alone or in combination, do not disclose or suggest wherein said location is identified by utilizing a portable
25 device assigned to said user, as required by independent claims 1, 16, 27, 38, 39, 42, 45, 49, 52, and 55.

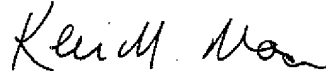
Conclusion

The rejections of the cited claims under section 103 in view of Li et al.,
30 MacDoran, and Meyer et al., alone or in any combination, are therefore believed to be

improper and should be withdrawn. The remaining rejected dependent claims are believed allowable for at least the reasons identified above with respect to the independent claims.

5 The attention of the Examiner and the Appeal Board to this matter is appreciated.

Respectfully,



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APPENDIX

- 1) A method for verifying the identity of a user, said method comprising the steps of:
 - 5 issuing a challenge to said user;
 - receiving a response to said challenge from said user;
 - identifying a location of an authorized person associated with said response, wherein said location is identified by utilizing a portable device assigned to said user;
 - identifying a location where said response is received; and
 - 10 providing access to said user if said locations match.
- 2) The method of claim 1, wherein said response is a password
- 3) The method of claim 1, wherein said response is a pocket token.
- 15 4) The method of claim 1, wherein said response is a computer-readable card.
- 5) The method of claim 1, wherein said response is biometric information.
- 20 6) The method of claim 1, wherein said location of an authorized person is obtained using an individual global positioning system.
- 7) The method of claim 6, wherein said individual global positioning system includes a local verification system.
- 25 8) The method of claim 6, wherein said individual global positioning system is included in a portable device carried by said authorized user.
- 9) The method of claim 1, wherein said location where said response is received is obtained from an individual global positioning system associated with a requested device or facility.
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10) The method of claim 1, wherein said location where said response is received is obtained from recorded information associated with a requested device or facility.

5 11) The method of claim 1, wherein said location of an authorized person is obtained using a triangulation technique.

12) The method of claim 1, wherein said location of an authorized person is obtained using enhanced cellular 911 techniques.

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13) The method of claim 1, wherein said location of an authorized person is obtained by identifying the location of a transmitting device associated with said authorized person.

15 14) The method of claim 1, wherein said location of an authorized person is confirmed by querying said user about something at the location of a requested device or facility.

15) The method of claim 14, further comprising the step of identifying said user
20 by applying speaker recognition techniques to an answer to said query.

16) A method for verifying the identity of a user, said method comprising the steps of:

receiving a response to a challenge from said user;

25 identifying a location of an authorized person associated with said response, wherein said location is identified by utilizing a portable device assigned to said authorized person;

identifying a location where said response is received; and
providing access to said user if said locations match.

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17) The method of claim 16, wherein said location of an authorized person is obtained using an individual global positioning system.

18) The method of claim 17, wherein said individual global positioning system
5 includes a local verification system.

19) The method of claim 17, wherein said individual global positioning system is included in a portable device carried by said authorized user.

10 20) The method of claim 16, wherein said location where said response is received is obtained from an individual global positioning system associated with a requested device or facility.

21) The method of claim 16, wherein said location where said response is
15 received is obtained from recorded information associated with a requested device or facility.

22) The method of claim 16, wherein said location of an authorized person is obtained using a triangulation technique.
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23) The method of claim 16, wherein said location of an authorized person is obtained using enhanced cellular 911 techniques

24) The method of claim 16, wherein said location of an authorized person is
25 obtained by identifying the location of a transmitting device associated with said authorized person

25) The method of claim 16, wherein said location of an authorized person is confirmed by querying said user about something at the location of a requested device or
30 facility.

26) The method of claim 25, further comprising the step of identifying said user by applying speaker recognition techniques to an answer to said query.

27) A system for verifying the identity of a user, comprising:
5 a memory that stores computer readable code; and
a processor operatively coupled to said memory, said processor configured to:

receive a response to a challenge from said user;

identify a location of an authorized person associated with said password,

10 wherein said location is identified by utilizing a portable device assigned to said authorized person;

identify a location of where said response is received; and

provide access to said user if said locations match.

15 28) The system of claim 27, wherein said location of an authorized person is obtained using an individual global positioning system.

29) The system of claim 28, wherein said individual global positioning system includes a local verification system.

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30) The system of claim 28, wherein said individual global positioning system is included in a portable device carried by said authorized user.

31) The system of claim 27, wherein said location where said response is
25 received is obtained from an individual global positioning system associated with a requested device or facility.

32) The system of claim 27, wherein said location where said response is
received is obtained from recorded information associated with a requested device or
30 facility.

33) The system of claim 27, wherein said location of an authorized person is obtained using a triangulation technique.

34) The system of claim 27, wherein said location of an authorized person is
5 obtained using enhanced cellular 911 techniques.

35) The system of claim 27, wherein said location of an authorized person is obtained by identifying the location of a transmitting device associated with said authorized person.

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36) The system of claim 27, wherein said location of an authorized person is confirmed by querying said user about something at the location of a requested device or facility

15 37) The system of claim 36, wherein said processor is further configured to identify said user by applying a speaker recognition technique to an answer to said query.

38) An article of manufacture for verifying the identity of a user, comprising:
a computer readable medium having computer readable code means
20 embodied thereon, said computer readable program code means comprising:
a step to receive a response to a challenge from said user;
a step to identify a location of an authorized person associated with said response, wherein said location is identified by utilizing a portable device assigned to said authorized person;
25 a step to identify a location where said response is received; and
a step to provide access to said user if said locations match.

39) A method for identifying a user requesting access to a device, said method comprising the steps of:
30 receiving biometric information from said user;

identifying each registered person within a predefined distance of said requested device, wherein said identification is performed by utilizing a portable device assigned to each registered person; and

5 identifying said user from among said identified persons using said biometric information

40) The method of claim 39, wherein said step of identifying each registered person within a predefined distance of said requested device further comprises the step of identifying individual global positioning systems associated with registered persons within
10 said predefined distance.

41) The method of claim 39, wherein said step of identifying each registered person within a predefined distance of said requested device further comprises the step of identifying transmitting devices associated with registered persons within said predefined
15 distance.

42) A method for identifying a user requesting access, said method comprising the steps of:
receiving biometric information from said user;
20 identifying a list of potential users based on said biometric information; and
identifying said user by comparing a location of each identified potential users with a location where said biometric information was obtained, wherein said location of each identified potential user is obtained by utilizing a portable device assigned to each identified potential user.

25 43) The method of claim 42, wherein said location of each identified potential user is obtained by identifying the location of an individual global positioning system associated with each of said identified potential users.

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44) The method of claim 42, wherein said location of each identified potential user is obtained by identifying the location of a transmitting device associated with each of said identified potential users.

5 45) A method for identifying of a user requesting access to a device, said method comprising the steps of:

receiving a communication from a transmitting device assigned to said user;

identifying said user using a voice recognition system; and

confirming said user requesting access to said device is physically present at

10 the location of said requested device by determining a location of said transmitting device.

46) The method of claim 45, wherein said transmitting device is a cellular telephone

15 47) The method of claim 46, further comprising the step of confirming that said user is using a cellular telephone associated with said user using caller identification techniques

48) The method of claim 47, wherein confirming step further comprises the step
20 of determining the location of said cellular telephone using enhanced cellular 911 techniques.

49) A system for identifying a user requesting access to a device, comprising:
a memory that stores computer readable code; and
25 a processor operatively coupled to said memory, said processor configured to:

receive biometric information from said user;

identify each registered person within a predefined distance of said requested device, wherein said identification is performed by utilizing a portable device assigned to
30 each registered person; and

identify said user from among said identified persons using said biometric information.

50) The system of claim 49, wherein said registered persons within a predefined distance of said requested device further are identified by identifying individual global positioning systems associated with registered persons within said predefined distance.

51) The system of claim 49, wherein said registered person within a predefined distance of said requested device are identified by identifying transmitting devices associated with registered persons within said predefined distance.

52) A system for identifying a user requesting access, comprising:
a memory that stores computer readable code; and
a processor operatively coupled to said memory, said processor configured to:
receive biometric information from said user;
identify a list of potential users based on said biometric information; and
identify said user by comparing a location of each identified potential users with a location where said biometric information was obtained, wherein said location of each identified potential user is obtained by utilizing a portable device assigned to each identified potential user.

53) The system of claim 52, wherein said location of each identified potential user is obtained by identifying the location of an individual global positioning system associated with each of said identified potential users.

54) The system of claim 52, wherein said location of each identified potential user is obtained by identifying the location of a transmitting device associated with each of said identified potential users.

- 55) A system for identifying of a user requesting access to a device, comprising:
a memory that stores computer readable code; and
a processor operatively coupled to said memory, said processor configured
to:
- 5 receive a communication from a transmitting device assigned to said user;
identify said user using a voice recognition system; and
confirm said user requesting access to said device is physically present at the
location of said requested device by determining a location of said transmitting device.
- 10 56) The system of claim 55, wherein said transmitting device is a cellular
telephone.
- 57) The system of claim 56, wherein said processor is further configured to
confirm that said user is using a cellular telephone associated with said user using caller
15 identification techniques.
- 58) The system of claim 57, wherein said processor is further configured to
determine the location of said cellular telephone using enhanced cellular 911 techniques.

EVIDENCE APPENDIX

There is no evidence submitted pursuant to § 1.130, 1.131, or 1.132 or entered by the Examiner and relied upon by appellant.

RELATED PROCEEDINGS APPENDIX

There are no known decisions rendered by a court or the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of 37 CFR 41.37.